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| APPLICATION NO. | F | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------------|------|-----------------------|----------------------|-------------------------|------------------|
| 09/701,622 06/19/2001 | | 06/19/2001 | Coenraad Jan Spaans | POLYGANICS-1 | 8926 |
| 7265 | 7590 | 04/01/2003 | | | |
| | | ND WALLACE | EXAMINER | | |
| PARKWAY 328 NEWMA | | FICE CENTER NGS RD | | GORR, RA | ACHEL F |
| P O BOX 8489 RED BANK, NJ 07701 | | | | ART UNIT | PAPER NUMBER |
| , | | | | 1711 | 17 |
| | | | | DATE MAILED: 04/01/2003 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | • | Application No. | | Applicant(s) | | | | |
|--|--|--|---|--|--|--|--|--|
| | _ | 09/701,622 | | SPAANS ET AL | | | | |
| | Office Action Summary | Examiner | | Art Unit | | | | |
| | | Rachel F Gorr | · | 1711 | | | | |
| | The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | |
| THE N - Exten after S - If the - If NO - Failur - Any re | DRTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. sions of time may be available under the provisions of 37 CFR 1.13 (SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing dipatent term adjustment. See 37 CFR 1 704(b). | 86(a) In no event, howe within the statutory mini vill apply and will expire S cause the application to | ver, may a reply be time imum of thirty (30) days SIX (6) MONTHS from t become ABANDONES | ely filed . will be considered timely the mailing date of this commons of to 0. (35 U.S.C. § 133) | | | | |
| 1) | Responsive to communication(s) filed on | · | | | | | | |
| 2a)[_ | · | is action is non-fir | nal. | | | | | |
| 3) | the first the most significant and the most si | | | | | | | |
| • | Claim(s) 61-85 is/are pending in the application | en. | | | | | | |
| * | 4a) Of the above claim(s) <u>83</u> is/are withdrawn f | | ١. | | | | | |
| | 5) Claim(s) 67,69,70,73 and 78-80 is/are allowed. | | | | | | | |
| 6) Claim(s) <u>61-66,68,71,72,74-77,81,82 and 85</u> is/are rejected. | | | | | | | | |
| | Claim(s) <u>84</u> is/are objected to. | | | | | | | |
| | Claim(s) are subject to restriction and/o | r election requirer | ment. | | | | | |
| Application Papers | | | | | | | | |
| , | The specification is objected to by the Examine | | | | | | | |
| 10) | The drawing(s) filed on is/are: a) accept | | | | | | | |
| | Applicant may not request that any objection to the | | | | | | | |
| 11) 🗌 | The proposed drawing correction filed on | | | ved by the Examiner | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | | | |
| 12)☐ The oath or declaration is objected to by the Examiner. | | | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | | | |
| | Acknowledgment is made of a claim for foreign | n priority under 35 |) U.S.C. § 119(a |)-(d) or (†). | | | | |
| a) | ⊠ All b) Some * c) None of: | | | | | | | |
| | 1. Certified copies of the priority document | | | • | | | | |
| | 2. Certified copies of the priority documents have been received in Application No | | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).* See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application, | | | | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 | | | | | | | | |
| Attachmen | | | | | | | | |
| . 2) 🔲 Notic | ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) _ | 4) | | y (PTG-413, Paper No.s. Patent Application (PTG-152) | | | | |
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1. Newly submitted claim 83 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: (see Paper No 10, paragraph 1.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 83 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

The applicant's argue in Paper No.12 that claim 83 represents the same invention as the rest of the claims. This claim to a diol capped with a diisocyanate was not presented in the original claims.

The restriction is still deemed proper and is therefore made FINAL.

- 2. Applicant is advised that should claim 62 be found allowable. claim 82 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).
- 3. Claim 85 is rejected under 35 U.S.C. 112, second paragraph. as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 85 is confusing because it's supposed to represent process steps for making a polyurethane. It isn't understood how a polyurethane could form by mixing a polyester and a hydroxy terminated urethane.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claim 71 is rejected under 35 U.S.C. 102(b) as being anticipated by Ambrose. See Paper No. 10, paragraph no. 4.
- 6. Applicant's arguments filed 2-19-03 have been fully considered but they are not persuasive. The applicants argue that Ambrose doesn't show uniformity of block length of the diol. Ambrose teaches the reaction between one diisocyanate and one diol only. There isn't any variation in the diol. The applicants argue that Ambrose lists butane diisocyanate among a list of others. Ambrose's invention is simple, with only two components. One of ordinary skill in the art can easily envision compounds of diisocyanate capped diols from any of the ingredients listed by Ambrose.
- 7. Claims 61, 63, 72, 76, 77 and 81 are rejected under 35 U.S.C. 102(b) as being anticipated by Quay.

See Paper No. 7, paragraph 12.

8. Applicant's arguments filed 2-19-03 have been fully considered but they are not persuasive. The applicants argue that Quay's polyurethane isn't biodegradable or

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biomedical. Quay's polyurethanes are made from the same ingredients as the applicants' claims – polyesters, aliphatic diisocyanates and diol chain extenders. Polyester polyurethanes are degradable. The applicants argue that Quay doesn't use butane diisocyanate. None of these claims are directed to butane diisocyanate. The applicants argue that Quay doesn't show uniform diol C because their polyol isn't uniform. Neither is the applicants' polyol uniform. In the disclosure, the applicants try to maintain uniformity of the diol (chain extender) by not allowing the diol and polyester to transesterify. Quay doesn't mix the polyester and diol chain extender. His hard block portion of the polyurethane is uniform because it is comprised of a single diol chain extender between the isocyanate caps of the polyester.

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claims 61-66, 68, 72, 74-76, 81 and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over de Groot (New Biomedical...) in view of Cohn. de Groot (Use of Porous...) and Gogolewski.

See Paper No. 10, paragraphs 9-13.

11. Applicant's arguments filed 2-19-03 have been fully considered but they are not persuasive. The applicants argue that de Groot doesn't show the diols (chain extenders) of the claims. Cohn teaches that diols and diamines can be used equivalently, with advantages with the use of diols. The applicants again argue that the

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polyol isn't uniform. This was addressed above. The claims are directed to the uniformity of the diol (chain extender). De Groot doesn't mix the polyester and the chain extenderl, so they wouldn't react to break down the polyester into smaller parts. The applicants argue that none of the references show the XYX structure for the diol. This diol isn't required in the claims. It's listed with other choices, such as the simple glycols taught by Cohn.

- 12. Claim 84 is objected to for depending on a rejected claim.
- 13. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachel F. Gorr whose telephone number is 703-308-3608. The examiner can normally be reached on Mon., Tues., Thurs., Fri., from 7:00 AM to 5:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck can be reached on 703-308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

R.G. March 28, 2003

> RACHEL GORR PRIMARY EXAMINER